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ABSTRACT

This curriculum package on introduction to textiles for team building for all associates has been developed by the Workforce 2000 Partnership, a network of industries and educational institutions that provides training in communication, computation, and creative thinking to employees and supervisors in textile, apparel, and carpet industries at 15 plants in Alabama, Georgia, and South Carolina. The curriculum guide provides a quick view of all major curriculum components: job title for which the curriculum was developed; general instructional objective; overall time; and a chart which is used by reading across the columns to match the specific instructional objective with the estimated amount of time required, learning activities, resources required, and evaluation method. A closure activity reviews and assesses skills learned and may identify needs for further learning. The lesson plan explains the activities in detail. Handouts, transparencies, and pre- and posttest are provided. This module is designed to analyze the teamwork involved in the textile process. Objectives include the following: define teamwork; describe the textile manufacturing process; and describe the associate's role as a team member in the textile process. (YLB)

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Introduction to Textiles for Team Building

EDUCATION PARTNERS

Enterprise State Junior College

MacArthur State Technical
College

Southeast Alabama Adult
Network

Laurens County Literacy Council

INDUSTRY PARTNERS

CMI Industries, Inc.

Opp & Micolos Mills

Pridecraft Enterprises

Shaw Industries

The Workforce 2000 Partnership combines the resources of educational and industrial partners to provide education and training in communication, computation and critical thinking skill to employees in the apparel, carpet and textile industries. The project is funded by a US Department of Education National Workplace Literacy Program grant awarded over three years to Enterprise State Junior College in the amount of \$2,243,470 (70%) with committed private sector matching funds of \$961,487 (30%), bringing the total program resources to \$3,204,957. The activities of the Partnership do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government. Participation by the education or industrial partners in the project should also not be construed as endorsement by the Government of any partners' products.

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INTRODUCTION

The Workforce 2000 Partnership is a network of industries and educational institutions that provides training in communication, computation, and creative thinking to employees in the textile, apparel, and carpet industries. The Partnership serves line employees and first-line supervisors at 15 plants in Alabama, Georgia, and South Carolina. The curricula for these topics is developed by the educational partners which include a junior college, a technical college, and two adult education/literacy programs.

The Partnership uses functional context curricula to teach the topics listed above. This introduction will describe how the curriculum is developed, the contents of this curriculum package, and how to involve learners in the educational process.

CURRICULUM DEVELOPMENT

Before writing curriculum instructors must know what employees need to learn. An instructional need is defined as the difference between what workers know and what the job requires. Project staff employ a variety of methods to analyze the duties and tasks of the jobs, as well as what kinds of communication, computation, and creative thinking skills are required. The analyses include interviewing exemplary workers; observing these workers on the job; interviewing groups of workers who perform the same or very similar jobs; reviewing documents such as job descriptions, handbooks, signs, memoranda, etc; interviewing supervisors and managers; and structuring surveys to be completed by workers, supervisors, and managers. Also during the analyses the curriculum developer will look for skills that the worker must perform to be considered for promotions.

Needs assessment is a vital part of the curriculum development process because the educator must fully understand what a worker does in order to determine what the worker must learn. As the needs assessment process continues, the educator also collects numerous documents to use as materials for instruction. The use of work-specific materials for instruction is what sets workplace education apart from other types of adult education. These materials allow skills to be learned in the classroom and more readily transferred to the plant floor. Therefore, reading skills improvement takes place as the worker is reading and comprehending the employee handbook; math skills improvement happens while the worker is computing percentages for production; and thinking skills improve as the worker is learning to work as a team member.

CONTENTS OF THIS CURRICULUM PACKAGE

The Curriculum Guide

The curriculum guide provides a quick view of all the major components of the curriculum. The job title for which the curriculum was originally developed and field tested is given in the upper left hand corner under the name of the curriculum module. Next is the General

Instructional Objective that defines the major purpose of the curriculum. The Overall Time is listed to estimate the amount of time that should be devoted to the entire module.

The chart is used by reading across the columns to match the Specific Instructional Objective with the estimated amount of time required, the Learning Activities, Resources required for the activities, and the Evaluation method used to assess achievement of the specific objective. The instructor should carefully review the column on Resources / Materials to ensure that necessary items are readily available. Copyrighted materials may be referenced in the Resources section of the Curriculum Guide; however, no copyrighted material has been duplicated and placed in this module.

Sequencing Learning Activities

Project staff use a model of instructional sequencing adapted from *Literacy at Work* by Jori Phillipi¹. In this model, the instructional sequence begins with an activity designed to invite the learners into the learning process. This activity will allow the learners to bring to mind past learning and experiences in a way that will facilitate the learning of new information. The activity may come from the workplace or from other real-life situations.

Once the new information has been presented, learners participate in activities designed to practice skills clustered in increasingly larger chunks. These skills are then applied to situations from the workplace to maximize the transfer of the skills learned. A closure activity provides for review and assessment of the skills learned and may also identify needs for further learning.

Lesson Plan

The Lesson Plan contains the detailed explanation of the activities referenced on the Curriculum Guide. Note that the numbering system for the activities is the same on the Curriculum Guide and in the Lesson Plan. In reviewing the Lesson Plan, the instructor should look for places where more appropriate work-specific items can be substituted. This substitution customizes the curriculum for the specific work site and makes the learning activities more meaningful for the learners involved.

Handouts, Transparencies and Tests

The Lesson Plan may require that handouts and/or transparencies be used in teaching the module. If so, these items are located behind the Lesson Plan in the curriculum package and are designated as Handouts or Transparencies in the header at the top of the page. If a pre- and post-test (called Preview and Review) are a part of the module, these will also be found in the Handouts section.

¹ Phillipi, Jori. *Literacy at Work: The Workbook for Program Directors*. New York: Simon & Schuster Workplace Resources, 1991.

INCLUDING LEARNERS IN THE EDUCATIONAL PROCESS

It is essential to provide opportunities for the adult learners to recognize their place in the educational process. The first step in the process is the assessment of the learner's skills and needs which is performed jointly by the learner and the instructor. This assessment becomes a part of the learner's Individual Education Plan (IEP). The IEP forms used by the Partnership are contained in this module. The IEP provides for collection of demographic data, evaluation of learner's skills and needs, and an outline of the activities in this module.

Every activity contains opportunities for evaluation, and, as much as possible, the learners perform the evaluation themselves. As curriculum is written, a page is developed for the learners to use to follow the sequence of activities and to document their performance. This page, called the Learner's Page, becomes a part of the IEP.

Frequently, pre- and post-tests (referred to as Previews and Reviews) are administered as a part of the evaluation process. Learners participate in scoring these tests and write their scores on their pages. To vary the assessment methods, the learners may be asked to rate themselves on their ability to perform certain skills, to write a phrase or statement that expresses their belief about their learning, or to specify what skills need more practice.

The purpose for including the learners in the evaluation process is to help them understand that assessment is reflective, constructive, and self-regulated. The learners, having participated in an ongoing needs assessment process, understand why they are participating in the learning activities. Therefore, including them in the evaluation of the learning gives them opportunities for relearning, synthesizing, and applying the skills.

Written self-evaluative comments on the Learner's Page also provide opportunities for communication between the learner and the instructor. This type of assessment is teacher-mediated (*i.e.* usually done when instructed by the teacher), ongoing, and cumulative. The Learner's Page is filed in his or her folder which is regularly reviewed by the instructor. During the reviews, the instructor may write comments in response to those made by the learner.

The goal of this curriculum is to enable learners to transfer classroom academic learning to the plant floor thereby improving productivity and efficiency. This curriculum will be most effective if the instructor customizes the curriculum to the specific worksite.

For more information
about the project or the
curricula contact:

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Curriculum Guide

Page 1

Module: Introduction to Textiles for Team Building
Job Title: All Associates

Author: Joan Howell

General Instructional Objective: To analyze the teamwork involved in the textile process
Overall Time: 8.5 hrs.

Specific Instructional Objective	Time	Learning Activities	Resources/Materials	Evaluation (Process/Status)
1. Motivation	20 min	1.1 Administer Preview and complete other paperwork.	Teacher constructed test	Test scores
2. Define <i>teamwork</i> .	10 min	2.1 Define <i>teamwork</i> .	Handout: "What Is a Self-Directed Work Team?" Amkarlo, Loren, and Jennifer Calloway. <u>Implementing Self-Directed Work Teams</u> . Boulder, CO: Career Track, 1994.	Class participation in discussion
	20 min	2.2 Discuss the importance of teamwork in a textile manufacturing plant.	Instructor and Plant Manager	Class participation
	20 min	2.3 Discuss the relationship between various processes, with emphasis on how each process relates to common goals.	Carding/Spinning Superintendent and Plant Manager	Class participation

Specific Instructional Objective	Time	Learning Activities	Resources/Materials	Evaluation (Process/Status)
3. Describe the textile manufacturing process.	10 min	3.1 Discuss history of industry site and overview of personnel and finances.	Human Resources Manager	
	4 hrs	3.2 Conduct lectures and demonstrations explaining the various operations involved in textile manufacturing (warehouse, roving, spinning, spooling, winding, warping, slashing, weaving, inspection, lab, supply, maintenance). Participants are included in the discussion of their particular jobs or departments.	Department supervisors	Class participation
	1.5 hrs	3.3 Tour all departments. Participants complete Tour Form during the course of the day.	Department supervisors Handout: Tour Form	Completion of Tour Form
	20 min	3.4 Conduct a questions and answers session.		Class participation
4. Describe the associate's role as a team member in the textile process.	5 min	4.1 Introduce participants by job.	Participants	Participation

Specific Instructional Objective	Time	Learning Activities	Resources/Materials	Evaluation (Process/Status)
	15 min	4.2 Discuss how each participant's job contributes to the common goals and how each perceives his role as a team member.	Instructor	Participation in discussion
5. Closure Activity	20 min	5.1 Administer review and evaluations.	Instructor	Test scores Completion of Evaluation

LESSON PLAN

Note: Instructions are placed in the order the curriculum is taught. The numbers match the instructional activities on the curriculum guide.

3.1 Instructional Activity - 10 minutes

Human Resources Manager will state a brief history of the industry site and an overview of information such as the number of associates and payroll costs. This data should help participants get an idea of the size of the "team."

1.1 Instructional Activity - 20 minutes

Instructor will administer a teacher-made preview containing information about the general textile process that would be beneficial as a basis for team building. Do not review answers. Complete Workplace Literacy forms at this time.

2.1 Instructional Activity - 10 minutes

Define *teamwork*. Discuss factors that contribute to the success or failure of a team. Provide handouts to summarize information.

2.2 Instructional Activity - 20 minutes

Instructor and plant manager will lead a discussion of the importance of teamwork in a textile manufacturing environment. Discuss the advantages of teamwork in a manufacturing environment.

4.1 Instructional Activity - 5 minutes

Participants are to introduce themselves, briefly describing their jobs.

3.2 Instructional Activity - 4 hours

Department supervisors will conduct an overview of the cotton warehouse and the opening, carding, roving, spinning, spooling, winding, warping, slashing, weaving, inspection, lab, supply, and maintenance processes.

3.3 Instructional Activity - 1.5 hours

Tour all areas of the plant and complete Tour Forms.

2.3 Instructional Activity - 20 minutes

Carding/spinning superintendent or plant manager will explain briefly how the previous processes relate to each other and to the following processes, emphasizing the relation of these processes to the unity of the entire manufacturing process.

4.2 Instructional Activity - 15 minutes

Instructor will lead a discussion of the importance of unity in the textile processes. Give

participants the opportunity to reflect upon how each associate contributes to the entire process. Make sure all participants understand that they play a part in making cloth whether they work in warehouses, carding, spinning, weaving, etc.

3.4 Instructional Activity - 20 minutes

Plant manager and carding/spinning superintendent will address questions from participants, focusing on the importance of teamwork throughout the manufacturing process.

5.1 Instructional Activity - 20 minutes

Administer review and student evaluation forms.

TOUR FORM

CLINTON MILLS—GENEVA

As you tour the plant, make notes about the following items. You will use your notes in a discussion following the last tour.

1. List the name of each department.

1. _____

6. _____

2. _____

7. _____

3. _____

8. _____

4. _____

9. _____

5. _____

2. What are the three (3) main raw materials used in the textile process?

3. What type of spinning is run in the Geneva plants?

4. How do you determine where a fire extinguisher is located?

5. What is the purpose of the lab?

6. What is the approximate dollar value of the inventoried supplies?

7. What is the end product of Clinton Mills—Geneva? What is it used for?

8. Of the 2 plants in Geneva, which is the older?

9. Where are the corporate offices located?

10. How many people work at Clinton Mills--Geneva?

11. What is the annual payroll at Clinton Mills--Geneva?

12. Who is the health insurance provider?

INTRODUCTION TO TEXTILES FOR TEAM BUILDING

Preview/Review

Name: _____

Date: _____

I. Match the following terms with their definitions.

- | | |
|-------------------|---|
| _____ 1. doffing | a. removing yarn from a bobbin and placing on a cone |
| _____ 2. winding | b. removing full items and replacing with empty ones |
| _____ 3. warping | c. paralleling and aligning fibers and coiling them |
| _____ 4. slasher | d. the process in which yarn is removed from a package and placed on a beam |
| _____ 5. warp end | e. a sized end that passes through the reed and harness on a loom |
| _____ 6. filling | f. lacing warp and filling together to make cloth |
| _____ 7. opening | g. a machine for sizing yarn for weaving |
| _____ 8. carding | h. the thread that is woven into the warp yarn |
| _____ 9. spinning | i. the removal of bale wrapping and the removal of trash from raw fiber |
| _____ 10. weaving | j. cleaning the warper |
| | k. the drafting and twisting of roving into yarn |

II. Number the following textile manufacturing processes in the order in which they occur at CMI Geneva. Circle the department in which you work.

- | | |
|------------------------|----------------|
| _____ weaving | _____ roving |
| _____ spooling/winding | _____ warping |
| _____ inspection | _____ drawing |
| _____ opening | _____ carding |
| _____ spinning | _____ slashing |

III. Discussion

1. Briefly define *team*.

2. Briefly describe your role as a team member at CMI.

INTRODUCTION TO TEXTILES FOR TEAM BUILDING
Preview/Review

Name: _____

Date: _____

I. Match the following terms with their definitions.

- | | |
|--------------------------|---|
| <u> b </u> 1. doffing | a. removing yarn from a bobbin and placing on a cone |
| <u> a </u> 2. winding | b. removing full items and replacing with empty ones |
| <u> d </u> 3. warping | c. paralleling and aligning fibers and coiling them |
| <u> g </u> 4. slasher | d. the process in which yarn is removed from a package and placed on a beam |
| <u> e </u> 5. warp end | e. a sized end that passes through the reed and harness on a loom |
| <u> h </u> 6. filling | f. lacing warp and filling together to make cloth |
| <u> i </u> 7. opening | g. a machine for sizing yarn for weaving |
| <u> c </u> 8. carding | h. the thread that is woven into the warp yarn |
| <u> k </u> 9. spinning | i. the removal of bale wrapping and the removal of trash from raw fiber |
| <u> f </u> 10. weaving | j. cleaning the warper |
| | k. the drafting and twisting of roving into yarn |

II. Number the following textile manufacturing processes in the order in which they occur at CMI Geneva. Circle the department in which you work.

- | | |
|-------------------------------|-----------------------|
| <u> 9 </u> weaving | <u> 4 </u> roving |
| <u> 6 </u> spooling/winding | <u> 7 </u> warping |
| <u> 10 </u> inspection | <u> 3 </u> drawing |
| <u> 1 </u> opening | <u> 2 </u> carding |
| <u> 5 </u> spinning | <u> 8 </u> slashing |

III. Discussion

1. Briefly define *team*.

(see handout)

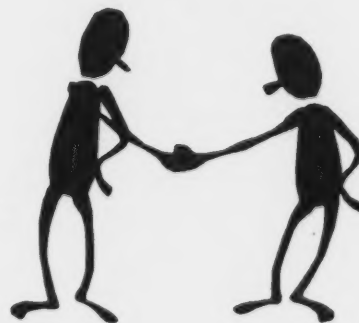
2. Briefly describe your role as a team member at CMI.

(answers will vary)

What is a Self-Directed Work Team?

- A functional group of employees who:
 - share responsibility for a unit of production
 - are cross-trained for maximum effectiveness
 - have authority to plan work processes and make decisions
 - have clearly defined goals and responsibilities

$$1 + 1 = 3$$



Benefits of a Self-Directed Work Team

- For Employee:

- Feeling of empowerment
- Realization of his link in the chain of productivity
- Increased job satisfaction



- For Employer:

- Improved quality
- Increased productivity
- Greater commitment
- Reduced operating costs



Characteristics of a Successful Team

- Mutual trust
- Mutual respect
- Cooperation
- Communication
- Anticipation of problems
- Common goals
- Interdependence
- Effective use of individuals' skills
- Constructive resolution of conflicts
- Rotating leadership
- Flexibility
- Action

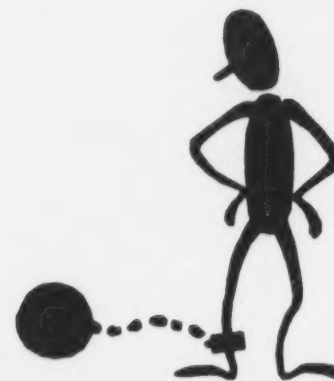


Characteristics of an Ineffective Team

- Lack of trust
- Miscommunication
- Misguided goal priorities
- Rigidity of thought and action
- Lack of training
- Lack of focus
- Poor listening skills
- Competition among team members
- Reaction

Source: Ankarlo, Loren, and Jenifer Callaway,
Implementing Self-Directed Work Teams.
Boulder, CO : CareerTrack, 1994.

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Revised 5/96

College: ESJC ___ MSTC ___
Course#: _____**WORKFORCE 2000 PARTNERSHIP
INDIVIDUAL EDUCATION PLAN**Date: _____
Level: _____

Name: _____ Male: ___ Female: ___ Age: ___ Birthdate: _____

Street: _____ Social Security#: _____

City: _____ State: _____ Zip: _____ Phone#: (____) _____

Classification: In-State Student ___ Out-of-State Student ___ (State) ___ International Student ___ (Country) _____

Mark Only One: Civilian ___ Active duty ___ Retired Military ___ Military dependent ___

Race: White ___ Hispanic ___ Asian ___ Black ___ American Indian ___ Pacific Islander ___ Alaskan Native ___ Other(Specify) _____

Marital Status: Single ___ Married ___ Separated ___ Divorced ___ Widowed ___

Number of Children Living with You: _____

Employer: _____ How Long? _____ Job Title: _____

How many hours per week do you work this job? _____ Do you have more than one job? _____

Please rate your ability to perform each of the following activities. (P=Poor, F=Fair, G=Good, E=Excellent):

Read English ___ Understand English ___ Speak English ___ Write English ___

Work as part of a team ___ Use Math ___ Solve problems/use reasoning ___

Which of the following are required for your job? (Check all that apply)

Read Instructions ___ Speak English ___ Receive Spoken Instruction in English ___

Write English ___ Use Math ___ Solve Problems ___ Team work ___

What are your vocational goals? Immediate _____ Long Range _____

Circle the highest grade you completed: 0 1 2 3 4 5 6 7 8 9 10 11 12 GED 13 14 15 16 17 18

Last school attended: _____

What are your educational goals? (Check all that apply)

Improve skills for current job ___ Improve skills for changing technology/future jobs ___

Improve reading/writing/math ___ Improve problem solving/critical thinking ___ Improve speaking/listening ___

Improve English(for non-native speakers) ___ Pass GED tests ___ Other(specify) _____

How would you like to be contacted? Through supervisor ___ Call at home ___ Letter ___ Other _____

WORKFORCE 2000 PARTNERSHIP

Individual Education Plan

Learner's Page

Page 17

Name of Course: Introduction to Textiles for Team Building

Date of Course: _____

Name : _____

Employer: _____

GOAL(S)	INSTRUCTIONAL OBJECTIVES	LEARNING ACTIVITIES	PREVIEW/REVIEW SCORE		EVALUATION COMMENTS
• Improve skills for current job • Improve skills for changing technology/future jobs • Improve problem solving/critical thinking	(Preview)	Administer Preview	_____	X	
	Define teamwork	1. Define teamwork 2. Discuss the importance of teamwork. 3. Discuss the relationship between various textile processes			
	Describe the textile manufacturing process	1. Discuss company history 2. Conduct lectures and demonstrations 3. Conduct tour 4. Conduct questions and answers session			
	Describe the associate's role as a team member in the textile process	1. Introduce participants by job. 2. Discuss how each job contributes to the common goal and the preception of team member's role			
	(Review)	Administer Review	X	_____	

Employee Signature _____

Date _____

Instructor Signature _____

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